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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/782,656

02/18/2004

Robert McCarthy

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EXAMINER

MCCLAIN, GERALD

ART UNIT

PAPER NUMBER

3653

MAIL DATE

DELIVERY MODE

06/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/782,656

Applicant(s)

MCCARTHY, ROBERT

Examiner

Gerald W. McClain

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,10,12-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 10 and 18 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,12-16 and 19-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The amendment filed 12 April 2007 has been entered.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Media Handling Device Utilizing Independent Offset Cups On A Support.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 19 is rejected under 35 U.S.C. 102(b) as being anticipated by Wirz (U.S. 4,378,734).

Claim 19: gripping a sheet of print media at different locations of the print media, the different locations being disposed along a line orthogonal to a direction of movement of the print media such that the sheet of print media has a corrugated cross-section along the line orthogonal to a direction of movement;

rotating the print media about an axis, at least two of the different locations being different distances from the axis (column 1, lines 35-41).

Claims 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Becker (U.S. 4,024,814).

Claim 20: means for gripping a sheet of print media at different locations of the print media, the different locations being disposed along a line orthogonal to a direction of movement of the print media such that the sheet of print media has a corrugated cross- section along the line orthogonal to a direction of movement (13);

means for rotating the print media about an axis such that at least two of the different locations are different distances from the axis (13);

Claim 21: forming an image on a medium (abstract, line 1); corrugating the medium (13, see Fig. 12).

Claim Rejections - 35 USC § 103

Claims 1-2, 4-5, 13-14, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Hudson et al. (U.S. 2004/0113349) ("Hudson").
Krueger teaches

Claims 1 and 4: support (67); cups (65);

Claim 1: distal surfaces (90); conveyor (111);

Claim 1: first plane (See Fig. 7, 65); second plane (See Fig. 7, 65);

Claim 2: rotatable member (67);

Claim 4: axis (of rotation) (center of 67),

where "cups" are equivalent to "suction members". Krueger does not directly show a liquid electrophotography print engine or a drum.

Hudson shows a similar device having a liquid electrophotography print engine (paragraph [0020], lines 3-7) and a drum (22) for the purpose of inexpensively reproducing print media. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention to modify Krueger as taught by Hudson and include Hudson's similar device having a liquid electrophotography print engine and a drum for the purpose of inexpensively reproducing print media.

Claims 6 and 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Hudson and Tajima (JP 62-215441). Krueger and Hudson teach all the limitations of the claim as discussed above. Krueger and Hudson do not directly show at least four suction members.

Tajima shows a similar device having at least four suction members (66a-66e) for the purpose of balancing the medium [sic] in the printing device. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention to modify Krueger and Hudson as taught by Tajima and include Tajima's similar device having at least four suction members for the purpose of balancing the medium [sic] in the printing device.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krueger in view of Wirz. Krueger teaches all the limitations of the claim as discussed above. Krueger does not directly show a gripper.

Wirz shows a similar device having a gripper (4) for the purpose of smoothing the sheet in travel direction (abstract). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention to modify Krueger as taught by Wirz and include Wirz's similar device having a gripper for the purpose of smoothing the sheet in travel direction.

Allowable Subject Matter

Claims 10 and 18 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: the sets of suction cups are rotatable independently from the second set of suction cups.

Response to Amendment

The suggested title is 68 characters long including spaces and is more specific than "media handling". Further, the title is to describe the overall, novel concept disclosed in this application. "[Requiring more specific titles] may result in slightly longer titles, but the loss in brevity of title will be more than offset by the gain in its informative value in indexing, classifying, searching, etc." See MPEP § 606.01.

In reference to the claim 19, the 35 USC § 102 rejection stands. In the previous Office Action, the following argument was made.

Wirz discloses that in the system in question, "the component of the tightening or tensioning motion extending in the circumferential direction of

the sheet transfer cylinder **is not** along a circumferential line [parallel to the direction of movement] of the drum but, in fact, the direction of motion of the rotary sucker actually ***lies on a tangent [orthogonal to a direction of movement] to the sheet transfer cylinder.***" (emphasis added)
Further, Wirz discloses that in the system in question, "the suction holes [at different locations] are at different distances from the middle point of the rotary sucker." These statements denote that "the different locations being disposed along a line orthogonal to a direction of movement of the print media such that the sheet of print media has a corrugated cross-section."

Applicant did not specifically address the points made in this argument in the Remarks filed 12 April 2007. As can be seen in the argument, the Applicant's remarks were addressed regarding the "direction of motion of the rotary sucker" relative to "the sheet transfer cylinder". Further, the disclosure and figures (Fig. 1 and 12) of Becker that correspond to the German Patent No. 24 52 096 ("GP") described in Wirz confirm that the argument analysis is correct in these regards.

In reference to the claims 20-21, the current 35 USC § 102 rejection stands. Applicant requested that the Examiner apply the standards of MPEP § 2181 to point out what specific elements are presumed to invoke 35 USC § 112 sixth paragraph. See MPEP § 2181 (II).

35 U.S.C. 112, sixth paragraph states that a claim limitation expressed in means-plus-function language "shall be construed to cover the corresponding structure...described in the specification and equivalents thereof." "If one employs means plus function language in a claim, *[the Applicant] must set forth in the specification an adequate disclosure showing what is meant by that language.* If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to *particularly point out and distinctly claim* the invention as required by the second paragraph of section 112." In re Donaldson Co., 16 F.3d 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994) (in banc). (emphasis added)

The Examiner contends that the Applicant failed to particularly point out and distinctly claim the invention in an adequate disclosure. In fact, in the first Office Action

mailed 16 November 2006, the Examiner requested that the Applicant "identify the corresponding structure in the specification for each means plus function recitation."

For example, the Applicant's specification states the following (paragraphs [00012] and [00031]).

In **some embodiments**, when the print media 110 is adhered to the staggered cups 130, the print media 110 is bent or corrugated such that the cross-sectional shape of the print media 110 at the cups 130 is non-planar, non-linear. ...

While the present invention has been particularly shown and described with reference to the foregoing example embodiments, those skilled in the art will understand that **many variations may be made therein** without departing from the spirit and scope of the invention as defined in the following claims. This description of the invention should be understood to include all novel and non-obvious combinations of elements described herein, and claims may be presented in this or a later application to any novel and non-obvious combination of these elements. The foregoing embodiments are illustrative, and no single feature or element is essential to all possible combinations that may be claimed in this or a later application. Where the claims recite "a" or "a first" element of the equivalent thereof, such claims should be understood to include incorporation of one or more such elements, neither requiring nor excluding two or more such elements. (emphasis added)

The 35 USC § 102 rejection drawn above sufficiently describes means of the prior art structure that is *capable of* performing the function as claimed. Therefore, the 35 USC § 102 rejection above stands as drawn.

In reference to the rejection for claims 1, 2, and 4, it was reported in the last Office Action that "there is a conveyor present in Krueger". However, the 35 USC § 103 rejection did not explicitly identify the conveyor as 111. Nevertheless, 111 is capable of conveying the print media from the support of Krueger to the print engine of Hudson. It should be noted that the support 27 of Hudson is implicitly equivalent to the support (67) of Krueger. Further, the liquid electrophotography print engine of Hudson is applied after the print media is conveyed by 111 of Krueger.

In reference to the Claims 6 and 12, the 35 USC § 103 rejections *have not been addressed* by Applicant. Therefore, the rejections stand as drawn above.

In reference to the claim 13, the 35 USC § 103 rejection stands. Motivation is substantiated as previously stated. Metal sheets can be the medium onto which an image is formed. See MPEP § 2115 ("Material Or Article Worked Upon Does Not Limit Apparatus Claims").

In response to applicant's argument that there is lack of reasonable expectation of success to print on metal sheets, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald W. McClain whose telephone number is (571) 272-7803. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Gerald W. McClain
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Art Unit 3653



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